R E P O R T R E S U M E S

ED 010 597 08

NATIONAL LEADERSHIP DEVELOPMENT SEMINAR FOR VOCATIONAL-TECHNICAL EDUCATION PERSONNEL HELD AT THE UNIVERSITY OF MISSOURI AT COLUMBIA, JULY 11-JULY 22, 1966.

BY- LONDON, H.H.
MISSOURI UNIV., COLUMBIA

REPORT NUMBER BR-6-2236 PUB DATE JUL 66
GRANT OEG-3-6-062236-0733
EDRS PRICE MF-$0.09 HC-$2.08 52P.

DESCRIPTORS- *SEMINARS, *VOCATIONAL EDUCATION, *LEADER PARTICIPATION, LEADERS GUIDES, *EDUCATIONAL NEEDS, *PERSONNEL SELECTION, PERSISTENCE, FOLLOWUP STUDIES, COLUMBIA, MISSOURI

A NATIONAL LEADERSHIP DEVELOPMENT SEMINAR WAS HELD TO AID IN RECRUITING, TRAINING, AND RETAINING QUALIFIED PERSONNEL IN VOCATIONAL EDUCATION. THE TRAINING PROGRAM INVOLVED 58 PARTICIPANTS FROM 12 MIDWESTERN STATES. THE REPORT OUTLINED THE TOPIC COVERED AND SUMMARIZED THE MAJOR TALKS GIVEN DURING THE SEMINAR. THE RESPONSE OF THE PARTICIPANTS TO AN EVALUATIVE QUESTIONNAIRE ON THE CONFERENCE WAS FAVORABLE. THE MAJORITY OF THE PARTICIPANTS FELT BETTER PREPARED AND WERE CHALLENGED TO PROVIDE GOOD LEADERSHIP IN VOCATIONAL-TECHNICAL EDUCATION AT NATIONAL, STATE, AND LOCAL LEVELS. A FOLLOWUP STUDY OF THE PARTICIPANTS WILL BE MADE A YEAR AFTER THE SEMINAR TO ASCERTAIN THE EXTENT TO WHICH THEY ARE PUTTING TO USE THE TRAINING RECEIVED. (GD)

ED010597

Project No. 6-2236
Contract No.
OEC 3-6-062236-0733

U. S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
Office of Education
This document has been reproduced exactly as received from the person or organization originating it. Points of view or opinions stated do not necessarily represent official Office of Education position or policy.

NATIONAL LEADERSHIP DEVELOPMENT SEMINAR

FOR

VOCATIONAL-TECHNICAL EDUCATION PERSONNEL

held at the

UNIVERSITY OF MISSOURI AT COLUMBIA

July 11 - July 22, 1966

In Cooperation With The

U. S. Office of Education

A Report

to the

U. S. Office of Education

PREFACE

It is generally agreed that the biggest single problem confronting local schools, state departments of education, and the U. S. Office of Education in implementing the new, enlarged, and expanded program of vocational education under Public Law 88210 is that of recruiting, training, and retaining qualified leaders.

Included here in summary form is a report of a National Leadership Development Seminar for vocational-technical personnel held at the University of Missouri from July 11 to July 22, 1966. The work reported herein was performed pursuant to a grant from the U. S. Office of Education, Department of Health, Education, and Welfare.

The report outlines the topics covered and lists the 58 participants and the various consultants who contributed to the Seminar. The reader will observe from the ratings that the participants appeared to be well satisfied with the content and procedures followed in conducting the Seminar. It is planned to make a follow-up study of the 58 participants after they have been out for a year to ascertain the extent to which they are putting to use the training received.

H. H. London
Professor of
Industrial Education

INTRODUCTION

The University of Missouri, in cooperation with the U. S. Office of Education, conducted a Leadership Development Seminar for Vocational-Technical Education on the campus of the University of Missouri, July 11-22, 1966. Fifty-eight participants from twelve mid-western states took part in the training program.

The airline strike threatened to dampen the enthusiasm of the staff and participants. Many speakers and resource people were unable to appear on the program due to transportation difficulties. Fortunately, good replacements were found and they, plus those who did manage to appear, provided a very profitable two weeks for the participants. Too much cannot be said for the enthusiastic participants who accepted the "changin schedule with understanding and appreciation for the circumstances in which they found themselves. These qualities of leadership presented a real challenge to the staff to try a little harder in their behalf.

OPENING THE CONFERENCE

A warm welcome was extended to the participants by Dr. Herbert W. Schooling, Dean of Faculties, University of Missouri. He expressed his interest in the development of leadership for vocational-technical education and wished for all a successful and profitable seminar.

The seminar staff and participants were introduced by Dr. H. H. London, Professor of Industrial Education, University of Missouri, and Director of the Seminar.

The first of many program changes to come was announced by David W. Berryman, Associate Director of the Seminar. An overall plan of the seminar was discussed, and he encouraged each participant to make the most of the opportunity afforded to them. The objectives of the seminar were presented as follows:

1. To provide an opportunity for all participants to have experiences in conference leading and other leadership techniques.

2. To gain an insight into the possibilities and responsibilities of leadership in vocational-technical education.

3. To gain an understanding of trends and future developments in vocational-technical education.

4. To become better acquainted with regulations and procedures involved in the establishment and operation of total programs of vocational-technical education.

5. To gain an insight into the manpower needs of the nation.

6. To become better acquainted with other agencies with which vocational-technical leaders must cooperate in the operation of their program.

7. To gain an insight into the necessity for evaluation of our programs and the methods and techniques for doing this.

SEMINAR STAFF

Director

H. H. London
Professor of Industrial Education
University of Missouri
Columbia, Missouri

Associate Director

David W. Berryman, Director
Vocational-Technical Education
Springfield, Missouri

Group Discussion Leaders

S. T. Brantner
Associate Professor of
Trade and Industrial Education
Pennsylvania State University
University Park, Pennsylvania

Merle E. Strong
Assistant Director
Ancillary Services
Division of Vocational-
Technical Education
U. S. Office of Education
Washington, D. C.

Don R. Sheets
Assistant Director of
Vocational-Technical Educati
Kansas City Public Schools
Kansas City, Missouri

Thaine E. McCormick
Regional Representative
Division of Vocational-
Technical Education
U. S. Office of Education
Kansas City, Missouri

RESOURCE PERSONNEL

Lane C. Ash
Associate Director for
Professional Resources
Division of Vocational-
Technical Education
U. S. Office of Education
Washington, D. C.

Harold Duis
Assistant Director
State Plans and Activities
Division of Vocational-
Technical Education
U. S. Office of Education
Washington, D. C.

Charles Foster
State Director of Guidance
State Department of Education
Jefferson City, Missouri

Norman C. Gysbers
Assistant Professor of Education
University of Missouri
Columbia, Missouri

Daryl J. Hobbs
Associate Professor of
Rural Sociology
University of Missouri
Columbia, Missouri

Denis J. Kigin
Associate Professor of
Industrial Education
University of Missouri
Columbia, Missouri

H. H. London
Professor of Industrial
Education
University of Missouri
Columbia, Missouri

William Berndt, Specialist
Curriculum and Instructional
Materials
Division of Vocational-
Technical Education
U. S. Office of Education
Washington, D. C.

Charles P. Elliott, Jr.
Coordinator of Field Service
Vocational Rehabilitation
State Department of Education
Jefferson City, Missouri

Willard J. Graff
Superintendent of Schools
Springfield, Missouri

Hubert Harris, Chief
Bureau of Family and
Children's Services
Division of Welfare
State Department of Public
Health and Welfare
Jefferson City, Missouri

James B. Karnes
Instructor of Industrial
Education
University of Missouri
Columbia, Missouri

Otto Legg, Research Specialist
Division of Vocational-
Technical Education
U. S. Office of Education
Washington, D. C.

Thaine E. McCormick
Regional Representative
Division of Vocational-
Technical Education
U. S. Office of Education
Kansas City, Missouri

S. D. McMillen, Director
Program Planning and
Development Branch
Division of Vocational-
Technical Education
U. S. Office of Education
Washington, D. C.

Randel Price
Professor of Extension Education
and Assistant Training Director
University Extension Division
University of Missouri
Columbia, Missouri

Merle E. Strong
Assistant Director
Ancillary Services
Division of Vocational-Technical
Education
U. S. Office of Education
Washington, D. C.

Stanley Osborne
Manpower Employment
Coordinator
Missouri Employment Security
Jefferson City, Missouri

Michael Russo
Assistant Director
Facilities Planning and
Development
Division of Vocational-
Technical Education
U. S. Office of Education
Washington, D. C.

Merton Wheeler
State Director of Industrial
Education
State Department of Educatio
Jefferson City, Missouri

MONDAY, JULY 11

SESSION 1

9:00 a.m. - 12:00 a.m.

Greetings

Herbert W. Schooling
Dean of Faculties, University of Missouri

Introduction of Seminar Staff and Participants

H. H. London, Professor of Industrial Education, University of Missouri

Purpose and Plan of Seminar

David W. Berryman, Director, Vocational-Technical Education, Springfield, Missouri

Topic: How We Got To Where We Are In Vocational-Technical Education, And The Challenge Ahead

Speaker: H. H. London

****

MONDAY, JULY 11

SESSION 2

1:15 - 4:30 p.m.

Presiding: H. H. London

Topic: Leadership-Administrative-Supervisory Implications of Vocational-Technical and MDTA Legislation

Speaker: Willard J. Graff, Superintendent of Schools, Springfield, Missouri

Questions, Answers, and Discussion

Organization of Conference Groups

TUESDAY, JULY 12

SESSION 3

8:15 - 12:00 a.m.

Presiding: David W. Berryman

TUESDAY, JULY 12

Topic: Developing and Using Administrative-Supervisory and Leadership Know-How

(Overview of Conference Leading and Other Leadership Techniques)

Panel Discussion	Role Playing
Symposium	Interview
Listening Team	Visual Aids
Task Force	Conference Leading
Buzz Session	

Speakers: Don R. Sheets
S. T. Brantner

Organize Task Force

Merle E. Strong

****

TUESDAY, JULY 12

SESSION 4

1:15 - 4:30 p.m.

Presiding: David W. Berryman

Demonstration of Conference Leading

Leader: S. T. Brantner

Buzz Session Technique

WEDNESDAY, JULY 13

SESSION 5

8:15 - 12:00 a.m.

Presiding: S. T. Brantner

Topic: Our Manpower Problem and Its Implications for Guidance and Vocational Education

Speaker: H. H. London

WEDNESDAY, JULY 13

Reaction Panel:

Stanley Osborne, Manpower Employment Coordinator, Missouri Employment Security, Jefferson City, Missouri

Daryl J. Hobbs, Associate Professor of Rural Sociology, University of Missouri, Columbia, Missouri

Merton Wheeler, State Director of Industrial Education, State Department of Education, Jefferson City, Missouri

James B. Karnes, Instructor of Industrial Education, University of Missouri, Columbia, Missouri

****

12:10 - 2:00 p.m. Luncheon Meeting

Presiding: H. H. London

Speaker: Denis J. Kigin, Associate Professor of Industrial Education, University of Missouri, Columbia, Missouri

****

WEDNESDAY, JULY 13

SESSION 6

2:10 - 4:30 p.m.

Conference Leading Sessions

Group	Conference Leaders
A	David W. Berryman
B	S. T. Brantner
C	Don R. Sheets
D	Merle E. Strong

THURSDAY, JULY 14

SESSION 7

8:15 - 12:00 a.m.

Presiding: Merle E. Strong

THURSDAY, JULY 14

Topic: Guidance, Counseling, and Other Services

Speaker: Lane C. Ash, Associate Director for Professional Resources, Division of Vocational-Technical Education, U. S. Office of Education, Washington, D. C.

Reaction Panel

Charles Foster, State Director of Guidance, State Department of Education, Jefferson City, Missouri

Norman C. Gysbers, Assistant Professor of Education, University of Missouri, Columbia, Missouri

Two Seminar Participants

****

THURSDAY, JULY 14

SESSION 8

1:15 - 3:45 p.m.

Presiding: Don R. Sheets

Topic: State Plans, Regulations, and Projected Program Activities

Speaker: Harold Duis, Assistant Director, State Plans and Activities, Division of Vocational-Technical Education, U. S. Office of Education, Washington, D. C.

Buzz Session Technique

Questions and Answers

3:45 - 4:30 p.m.

Conference Leading Sessions

Group	Conference Leaders
A	David W. Berryman
B	S. T. Brantner
C	Don R. Sheets
D	Merle E. Strong

FRIDAY, JULY 15

SESSION 9

8:15 - 12:00 a.m.

Presiding: S. T. Brantner

Topic: Pre- and In-Service Teacher Education

Speaker: Merle E. Strong

Listening Team Technique

****

11:45 - 1:45 Luncheon Meeting

Presiding: H. H. London

Speaker: Lane C. Ash

****

FRIDAY, JULY 15

SESSION 10

2:00 - 4:30 p.m.

Conference Leading Sessions

Group	Conference Leaders
A	David W. Berryman
B	S. T. Brantner
C	Don R. Sheets
D	Merle E. Strong

MONDAY, JULY 18

SESSION 11

8:15 - 12:00 a.m.

Presiding: David W. Berryman

Topic: New Trends in Facilities Planning

Speaker: Michael Russo, Assistant Director, Facilities Planning and Development, Division of Vocational-Technical Education, U. S. Office of Education, Washington, D. C.

MONDAY, JULY 18

Reaction Panel:

Panel Members: Merton Wheeler
Three Seminar Participants

****

MONDAY, JULY 18

SESSION 12

1:15 - 4:30 p.m.

Presiding: H. H. London

Topic: Research, Experimental, and Pilot Programs

Speaker: Otto Legg, Research Specialist, Division of Vocational-Technical Education, U. S. Office of Education, Washington, D. C.

Buzz Session Technique

Questions and Answers

TUESDAY, JULY 19

SESSION 13

8:15 - 12:00 a.m.

Presiding: S. T. Brantner

Topic: Planning Total Programs of Vocational-Technical Education

Speaker: S. D. McMillen, Director, Program Planning and Development Branch, Division of Vocational-Technical Education, U. S. Office of Education, Washington, D. C.

Case Study and Discussion of Problems

****

TUESDAY, JULY 19

SESSION 13 (Continued)

TUESDAY, JULY 19

1:15 - 2:30 p.m.

Presiding: S. T. Brantner

Topic: Planning Total Programs of Vocational-Technical Education (Continued)

Speaker: S. D. McMillen

****

TUESDAY, JULY 19

SESSION 14

2:45 - 4:30 p.m.

Presiding: S. T. Brantner

Topic: Curriculum Development To Meet Needs of All Areas of Vocational-Technical Education

Speaker: William Berndt, Specialist, Curriculum and Instructional Materials, Division of Vocational-Technical Education, U. S. Office of Education, Washington, D. C.

WEDNESDAY, JULY 20

SESSION 15

8:15 - 12:00 a.m.

Presiding: Don R. Sheets

Topic: Cooperation With Other Agencies In Coordinating Programs of Vocational Education: A Symposium

Speakers: Charles P. Elliott, Jr., Coordinator of Field Services, Vocational Rehabilitation, State Department of Education, Jefferson City, Missouri

Stanley Osborne, Manpower Employment Coordinator, Missouri Employment Security, Jefferson City, Missouri

WEDNESDAY, JULY 20

Speakers: Hubert Harris, Chief, Bureau of Family and Children's Services, Division of Welfare, State Department of Public Health and Welfare, Jefferson City, Missouri

Randel Price, Professor of Extension Education and Assistant Training Director, University Extension Division, University of Missouri, Columbia, Missouri

Questions and Answers

****

WEDNESDAY, JULY 20

SESSION 16

1:15 - 4:30 p.m.

Conference Leading Sessions

Group	Conference Leaders
A	David W. Berryman
B	S. T. Brantner
C	Don R. Sheets
D	Thaine E. McCormick

THURSDAY, JULY 21

SESSION 17

8:15 - 12:00 a.m.

Presiding: David W. Berryman

Topic: State and Local Evaluation of Training Programs

Speaker: Thaine E. McCormick, Regional Representative, Division of Vocational-Technical Education, U. S. Office of Education, Kansas City, Missouri

Round Table Discussion Technique

****

THURSDAY, JULY 21

SESSION 18

1:15 - 4:30 p.m.

Conference Leading Sessions

Group	Conference Leaders
A	David W. Berryman
B	S. T. Brantner
C	Don R. Sheets
D	Thaine E. McCormick

FRIDAY, JULY 22

SESSION 19

8:15 - 12:00 a.m.

Presiding: Thaine E. McCormick

Topic: Task Force Report

Questions and Answers

Final Seminar Evaluation

****

FRIDAY, JULY 22

SESSION 20

12:10 - 2:00 p.m. Luncheon Meeting

Presiding: H. H. London

Topic: Closing Details

Remarks: S. T. Brantner
Don R. Sheets
Thaine E. McCormick
David W. Berryman

Presentation of Certificates

RESOURCE PRESENTATIONS

TOPIC: How We Got To Where We Are In Vocational-Technical Education, And The Challenge Ahead

H. H. London
Professor of Industrial Education
University of Missouri
Columbia, Missouri

The history of vocational education, dating back to the early apprenticeship system, was reviewed. This type of training existed in America for roughly 200 years and was the chief source of education for the masses during that period, since they had no public schools and only a few colleges. In essence, apprenticeship was the mother of both public elementary education and vocational education in America.

With the beginning of the Industrial Revolution in 1820, the handicraft occupations were subdivided into specialized operator's jobs and crafts. A second thing that resulted from the Industrial Revolution, consequently, was the rise of big corporations organized to produce and sell mass-made goods; and the third significant outgrowth of this was the migration of large numbers of people from farms into factory towns and cities where they became employees.

The supply of skilled workers coming to America from European countries came to an end with the beginning of the War Between the States. Apprenticeship had come to mean sweatshops, exploitation, and poor relief, so parents refused to allow their children to participate. This meant that apprenticeship was dead, and we had no means of training workers. Due to these developments, American products could not compete with those made in European countries. The result was that business and industrial people turned to the schools to develop a substitute for the defunct apprenticeship system.

Schoolmen of 1870 were not graduates of public universities but rather of church affiliated schools, and they possessed an ecclesiastical philosophy. They were not interested in this world--they were interested in the next world. The history of vocational education was further developed to reveal the influence of the Russian manual training system and the part played by the American Labor Movement. Many vocational educators played vital roles in the development of this educational process and were instrumental in the passage of many federal acts starting with the Smith-Hughes Act on through the Vocational Education Act of

of 1963. It was not until the passage of the 1963 Act that any appreciable change in the nature of the program was provided. The major impact of this law is yet to be felt. This will come about with the first national evaluation in 1968. We will then know how well we have served high school youth, post secondary youth, adults, and youth with special needs.

The major changes resulting from the passage of the Vocational Education Act of 1963 are as follows:

1. Five times as much money.
2. Clarification of "less than college grade."
3. Broadened and redirected program of Vocational Agriculture.
4. Less federal money for traditional home-and-family-life education, and a new emphasis on training of women for wage earning.
5. Less emphasis on vocational categories or services.
6. Business Education now a member of vocational education family, and preparatory Distributive Education programs possible.
7. Technical education a permanent program; also Practical Nursing.
8. Area Vocational-Technical Schools earmarked for development--can buy equipment and build buildings.
9. Program must be realistically related to labor-market needs.
10. Enrollees must declare a vocational objective.
11. Follow-up and evaluation to be permanent and necessary functions.
12. Training directed more toward job families.

Having reviewed the history of vocational education and having enumerated changes brought about by the Act of 1963, the following challenges were directed to vocational educators:

1. We must relate our programs to manpower needs.
2. We must place our trainees--anything called vocational education which does not result in employment is a delusion.
3. We must reach and serve more people, especially

   Adults--
   Youth with special needs.
   In 1960, only 17.2 per cent of high school youth were enrolled in vocational education.

4. We must recruit, train, and retain qualified leaders and teachers. (Better pay is a necessity.)
5. We must change the image of vocational education.
6. We must have more realistic vocational guidance.
7. We must evaluate our programs constantly.

TOPIC: Leadership-Administrative-Supervisory Implications of Vocational-Technical and MDTA Legislation

Willard J. Graff
Superintendent of Schools
Springfield, Missouri

Before we can discuss leadership implications for vocational-technical education, we must first evaluate the kind of world in which we are living. I grew up in one world, yet I am living in another world. Our professional responsibility requires that we anticipate and project the shape of the world emerging and then design an educational pursuit for our youth in order that they might best adapt themselves to this world.

What will the world look like in the year 2000 in regard to population? We are told the population will be 6 1/4 billion. China and Southeast Asia will have 3 1/2 billion, while in America there will be only 315 million. Such a distribution of people will bring about a rapid tempo of change. America was the first nation to undertake free public education. We no longer have such a monopoly, and the only way we will be able to compete with other nations is with "brainpower."

Presently, there are 198 million people in the United States The median age of our people is 25.6 years, and by 1970 this median age will be 25 years. This means that one-half of our population will be under 25 years of age, and such a distribution has many implications for the future. All of these people will need to be educated, housed, fed, and clothed. How will we plan for their leisure time with shorter and shorter work weeks? Vocational educators are faced with the responsibility and opportunity to make a contribution for this world that is changing with an accelerated tempo.

As a school administrator, I see the number one problem in America to be: How does a free, affluent society transmit its heritage to its young? We hear a lot about poverty; but in my judgment, there are two kinds of poverty--qualitative and quantitative. To which will the placement of values be directed? Will free public education be maintained with control remaining in the hands of the local school district?

In order to have good leadership in vocational-technical education, you must first have a philosophy. A statement of the things for which you stand and the goals by which they can be attained, should be set forth in your philosophy.

Next, we need to establish criteria essential to the development of policies, rules, and regulations. The criteria must conform with the philosophy established for vocational-technical education.

We now should be able to construct our organizational procedure that will enable us to administer and provide leadership. Such an organizational structure should reflect our philosophy and criteria.

Leadership must then develop and establish a program for vocational-technical education. In our changing world, we must dream a little in order that our program can be realistic and flexible.

Any program development can profit by the use of advisory committees. Experience has proven that ad hoc committees are more effective. They are appointed, do the job called for, and then are disbanded. The danger of general advisory committees is that quite frequently they become a second board of education.

With the above factors having been determined, we are now ready to develop a curriculum. This should be constructed from beginning to end and should involve secondary, post secondary, adults, and people with special needs. Both sequence and scope should be guideposts in the curriculum development.

Leadership in vocational-technical education also involves public information. Through this media and through the placement of skilled youth and adults, our vocational-technical program receives a good image in the eyes of our public. The more we are involved in public information, the stronger our relations with our public become.

TOPIC: Developing and Using Administrative-Supervisory and Leadership Know-How

S. T. Brantner
Don R. Sheets
Merle E. Strong

In the development of leadership know-how, many techniques for group participation were presented by the conference leaders. The uses and differences of the panel discussion and the symposium were explained with advantages and disadvantages of both being discussed. The effectiveness of the buzz session and listening team were introduced as useful techniques for large groups in the solution of problems. The task force was introduced briefly with a more detailed explanation and assignments being given by Dr. Strong in a later session. Role playing, the interview, and visual aids were included in the overall discussion.

The conference leading technique was demonstrated by Dr. Brantner using a group of participants as his conference group. Consideration was given to the planning and arranging by the leader prior to the meeting and the methods of guiding and directing the group while in conference. A very complete and interesting demonstration was given with buzz session technique used following. Each participant was able to lead one conference during the two weeks. The round table discussion technique was used in conjunction with one session.

TOPIC: Our Manpower Problem and Its Implications for Guidance and Education

H. H. London
Professor of Industrial Education
University of Missouri
Columbia, Missouri

Our manpower problem, stated briefly, is this: If, on the one hand, we take the present distribution of the labor force and the estimated future needs in the various occupations, and, on the other hand, the number of available workers, the number of youth reaching employment age each year, and their occupational choices and competencies, we find that the two are miles apart. In short, we have great imbalances between our labor supply and demand. Millions of people are unemployed; and at the same time, many jobs go begging for want of qualified people to fill them.

This problem arises out of three main factors: First, significant changes in the composition of our population. Prior to 1920, immigration was the major factor in population growth. Since 1930 excess of births over deaths has accounted for the major portion of our increase in population.

In 1940 children under 10 years of age numbered 21 million and represented one-sixth of the population; by 1960 their number had grown to 39 million, as one-fifth of the total population. These boys and girls are in our schools today, and they will enter the labor force in increasing numbers in the years ahead.

Another significant change in the composition of our population is the actual and relative increase in the number of older persons, due largely to improvements in living standards and medical science.

Still another change affecting our manpower problem is the ratio of males to females; we now have more girls and women than we have boys and men. At the present time, about one-third of our labor force consists of women; and approximately five million additional women will join the labor force by 1965.

The most significant change in the composition of our population has been the shift from rural to urban. The U. S. Department of Labor estimates that only one out of ten youth born on the farm will remain there.

The second factor is the impact of technological changes. The second industrial revolution, beginning with World War II,

called advanced mechanization or automation, is relieving man of the monotony of repetitive processes and substituted electronic, pneumatic, and hydraulic devices for human judgment and control. As a result, productivity is sky-rocketing to unbelievable heights.

This great upheaval is changing the nature of the labor force and increasing the need for highly trained personnel in nearly every line of endeavor. Already, there is practically no place left in our entire economy for the uneducated and unskilled worker. Just recently, we arrived at the point in this country where we have fewer people engaged in the producing occupations than in other types of occupations--a status attained in only a few countries of the world.

Thirdly, the most significant single factor in accounting for the current imbalance between manpower supply and demand in America has been the complete lack, until just recently, of any manpower management program.

In a democracy, freedom of occupational choice, at least in theory, is looked upon as an almost sacred right of the individual. Yet, in practice, we observe on every hand that ignorance, poverty, race, place of residence, or even chance often thwart freedom of occupational choice. Then, there is the white collar complex which often causes both youth and their parents to shun real opportunities in the labor market in search of an occupational Utopia. In their desire to lighten the work load of their children, many parents have ignored reality in regard to the occupational choices and training of their sons and daughters. Youth, by nature, tend to look with favor upon occupations that are characterized by glamour and adventure; and they know very little, really, about the 22,000 different occupations available to them. At graduation time, a third of our youth have made no occupational choice whatever; and the choices that are made are often grossly out of line with reality.

What can be done about it? It seems the appropriate answer to this problem would be to design a manpower management program to keep labor supply and demand in balance and to make maximum use of human resources. Such a program would involve the schools as follows:

1. Keeping up with labor supply and demand, especially in critical occupations, through Department of Labor sources, census reports, local occupational surveys, and the use of advisory committees in the different occupations.

2. The methodical testing and classification of youth as they pass through the schools to ascertain their assets and liabilities as potential workers in the different occupations.

3. A down-to-earth vocational counseling service reaching both students and their parents.

4. Fundamental changes in our educational system. We must provide one type of secondary education for the academically talented youth, another for the average, and still another for the dull, with such elements as citizenship training, physical and health education, music, art, and the like as unified agencies.

5. More attention must be given to the placement of people in the occupations for which they have been trained.

Counselors and school administrators should know that, in the final analysis, vocational education must be evaluated in terms of three things: (1) the percentage of those trained who find employment in the occupation for which they were trained or a related one; (2) how well they perform in this occupation in comparison with those who lack such training; and (3) how well they as individuals are satisfied with the training they received, the employment received, and the advancement made as a result of the training.

TOPIC: Developments and Trends in Vocational-Technical Education

Dr. Denis J. Kigin
Associate Professor of Industrial Education
University of Missouri
Columbia, Missouri

A comprehensive educational system must provide experiences so that an individual has the basic tools and skills to earn a living. Therefore, education cannot realistically serve without vocational-technical education. There are many ways to enter the world of work, but the medium of vocational education is looked upon by many as the most effective.

The mortality rate of high school students is high. Three out of ten will drop out of school and into the world of work. Three more will drop out on completion of high school. Four will go on to college. Two will complete a professional degree and the other two will enter the world of work before completing a college degree. We are not sure what effect area vocational schools and junior colleges will have on these statistics, but we think it will be significant.

The economics of education become pretty realistic when we study what is being attempted with the war on poverty. One of the major concepts of the war on poverty involves the upgrading of educational skills in general and vocational skills in particular. The late John F. Kennedy said, "The human mind is our fundamental resource." The Office of Urban Affairs, which, among other things, administers the Economic Opportunity Act, recognizes this and is an example of a non-educational group accepting the challenge. Federal funds are available to private groups, schools, and industry.

It is well for us to become familiar with other agencies and break from the educational cocoon in which many of us have enmeshed ourselves. Don't hesitate to step outside and see what is going on. Many decisions remain unmade, impeded by the fear of making a mistake. These people need assistance and as President Johnson has so effectively said, "War on poverty can be won only if those who are poverty's prisoners can break the chains of ignorance." We must also break the chains of tradition and "it's always been done this way."

We actually pay for the poor three times, and it is economically sound for all of us to help alleviate poverty.

1. Society loses the production of wasted human potential.
2. Poor have little or no purchasing power.
3. We direct necessary funds to alleviate misery in the form of various welfare payments.

The Panel of Consultants, appointed on October 5, 1961, was convinced that vocational and technical education is sound investment in people. A study recently sponsored by the American Institute of Research substantiated this. They found that high school graduates who majored in vocational programs enjoy greater job security than high school graduates who majored in academic programs but lacked a college education.

The study also revealed that vocational graduates obtain full-time employment much more quickly than academic graduates. Average job hunting time for vocational graduates was found to be less than six weeks while job hunting time for academic graduates exceeded ten weeks. Along with greater employment security, vocational graduates earn more and about half enter the trades for which they trained. This is actually a respectable percentage.

However, the study also pointed out some deficiencies. The study revealed that Negro vocational graduates have more difficulty getting their first full time job, enjoy substantially less employment security, earn significantly less pay, and are much less likely to enter the trade for which they trained. Fewer than 17 per cent of the Negro graduates were able to get their first full time job in the trade for which they trained.

The American Institute of Research study findings contradict the argument that vocational graduates are sub-standard members of the community and lack a well-rounded education as a result of their specialized training. A comparison of vocational and non-college academic graduates revealed no difference in conversational interests, leisure time activities, and affiliation with community organizations.

HOW NEEDS ARE BEING MET

Patterns of vocational-technical education are developing in almost all states with some related dangers evident. When administrators get involved in vocational-technical education only because of the money available, there is a lot of muddy water ahead.

The Vocational Education Act of 1963 has provided a real boost to Vocational-Technical Education. This is evident in the comprehensive high school, the area vocational school, community or junior college, and even in the four-year colleges and universities.

A review of the survey of the Vocational-Technical Education in Missouri, directed by Dr. J. Chester Swanson of the University of California at Berkeley, was made showing the many areas of development in vocational-technical education within the state of Missouri.

TOPIC: Counseling and Other Supportative Services

Lane C. Ash, Associate Director for
Professional Resources
Division of Vocational-Technical Education
U. S. Office of Education
Washington, D. C.

Vocational guidance is an integral part of the total program of vocational and technical education. It includes the range of student personnel services from testing and selection of students to job placement and follow-up of them after leaving or completing training programs. These services are authorized under the Federal Vocational Education Act.

There is a shortage of counselors of all kinds and especially of vocational guidance personnel or counselors who are equipped to provide vocational counseling services to students of all ages. It is likely that this situation will not be greatly improved until vocational educators recognize their own responsibility to assist counselors to become better acquainted with the world of work, and the requirements for entry thereto, as well as the employment conditions surrounding jobs of all kinds in the labor force, and the financial and psychological rewards in these occupations.

Vocational guidance had its beginning in the work of Frank Parsons in Boston in 1908. His concept of vocational guidance was expressed as: (a) a clear understanding of self, (b) a knowledge of requirements and conditions for success in different lines of work, and (c) "true reasoning" on the relations of factors obtained by these two processes.

The purpose of vocational guidance is to provide individuals with the information and skills needed to make wise decisions in matters affecting vocational adjustment. A program of vocational guidance services is designed to result in efficiency in education and training, both for the individual and the school, and to improve the chances of the individual for progress and satisfaction in his occupation.

The George-Barden Act of 1946 for the first time authorized expenditures of vocational education funds for salaries and expenses of vocational counselors and the development of programs of vocational guidance. The States did not exercise this authority to any great extent; the largest number of States involved (14) was reported in 1951. By 1961 only 7 States were participating in this program, and in that year only 1 per cent of the total Federal expenditure for vocational education was reported for vocational guidance purposes.

The need for more and better counseling is almost universally recognized. The Panel of Consultants, in its report, had a great deal to say about this including: "To be effective, any educational program, including vocational education, should be accompanied by a fully adequate program of guidance services. Such guidance services should begin early and should be continuously available to students from elementary school through high school. Such service should be available to out-of-school youth and adults, as well as to those enrolled in post-high school educational programs, and should be closely coordinated with their counterparts in community agencies and organizations providing training, placement, and counseling service to young workers and adults."

The Vocational Education Act of 1963 recognizes this need and provides in its definition that vocational education includes vocational guidance and counseling in connection with such training. Further, the Act authorizes expenditure of funds for the training of vocational counselors. Accordingly, the regulations require that the State plan provide for such vocational guidance and counseling personnel and service as are required to facilitate the program of instruction; that follow-up procedures be conducted to determine the effectiveness of guidance and counseling programs; that adequate provisions be made for the use of occupational information, for program leadership, and for supervision to provide better vocational guidance and counseling services at the local level.

The Program Services Branch of the Division of Vocational and Technical Education is organized to provide assistance to the States both in the improvement of State supervision of guidance programs and for the broadening and improvement of vocational counselor training. Further, services of an occupational analyst are available; and by the use of funds appropriated by Congress for instructional materials, improved occupational information may be developed.

Vocational guidance is an integral part of the total program of vocational education. It will be improved to the extent that vocational education leadership assumes responsibility for this.

TOPIC: State Plan for Projected Program Activities

Harold Duis, Assistant Director
State Plans and Activities
Division of Vocational-Technical Education
U. S. Office of Education
Washington, D. C.

Vocational Education Acts

Many pieces of legislation have been enacted by Congress for the promotion and development of vocational and technical education. In each act, the Federal Congress has identified the educational objectives to be attained; and use of federal funds has been directed to these objectives. In each instance, the federal grants to states are for the purpose of administering and operating vocational education programs.

In each vocational program operated cooperatively between the federal and state governments, the State Board for Vocational Education has been designated as the sole agency responsible for the administration of the program. In most states, the State Director of Vocational Education has been named to represent the State Board. Each state submits a plan for the purpose of establishing criteria for the operation of vocational programs in the state. Dating back to the Smith-Hughes Act of 1917, there has been a strong federal-state relationship. Federal dollars available for matching purposes to the states have increased rapidly over the past fifty years. In 1964 this relationship was $1 to $5.05. In 1965 this ratio was $1 to $3.02.

The Vocational Act of 1963 identified the State Board of Vocational Education, as was done in the Smith-Hughes Act. The main features of the new act were: (1) Maintain, extend, and improve vocational programs, (2) establishment of area vocational schools, (3) work study programs, and (4) research.

Section 5 of the new Act makes provisions for the State Plan to include a State Board or Advisory Committee. The criteria for selecting persons include actual experience and work in or association with fields of management and labor and recent association with an institution's vocational education programs.

The Act provides for allocating funds for various purposes with due consideration given to (1) vocational education needs of all persons of all age groups in all communities and results of periodical evaluation of vocational education programs in

light of manpower needs and opportunities and (2) the need for maintaining, extending, and improving existing programs and developing new programs. Various criteria have been established for the allocation of funds to meet these various purposes. The Act also forms a basis for the State Plan Guide in the following:

1. Minimum qualifications of personnel or staff organization.
2. Cooperative arrangement with public employment office.
3. Fiscal control and fiscal accounting procedures.
4. Terms and conditions for construction projects.
5. Reports.

Regulations

The regulations interpret the acts and provide a basis for state plans geared to these acts in the expenditure of federal funds. Matching provisions are identified to the 1963 Act, George-Barden Act, and the Smith-Hughes Act.

Projected Program Activities

Each state must annually submit a statement describing its total program of activities for maintaining, extending, and improving vocational education in the state. This, in effect, should reflect a balanced total program for all persons, communities, occupations, and institutions.

TOPIC: Pre- and In-Service Teacher Education

Dr. Merle E. Strong, Assistant Director
Ancillary Services
Division of Vocational-Technical Education
U. S. Office of Education
Washington, D. C.

Teacher education is undoubtedly among the most important considerations we face in vocational education. This is not just my opinion, but rather the opinion of vocational educators across the Nation, if I understand what is being said. In virtually every State and at every level, lack of qualified personnel is said to be the number one problem.

The Panel of Consultants on Vocational Education states . . . "That the State Board for vocational education through the vocational division of the State departments must evaluate the selection, training, supervision, and in-service growth of teachers in order to maintain a satisfactory standard of excellence."

The Committee reaffirms the fact that State boards for vocational education have a major responsibility for teacher education. This concept is reflected in the Vocational Education Act of 1963, resulting in most State Boards exercising a leadership role in providing teacher education services. The most adequate and effective programs result when a written agreement is developed between representatives of the State Board of Vocational Education and servicing institutions which clearly identifies:

(1) Services to be rendered;
(2) Personnel;
(3) Relationships of staff to State office;
(4) Supervision; -- How and by whom;
(5) Financial arrangements.

The Vocational Education Act of 1963 reflects changes and needs in the Nation's occupational structure, adding the following new dimension which directly effects the teacher education program:

- The addition of Office Occupations to vocational education.
- Provision for Distributive Education as a preparatory program.
- Provision for programs for gainful employment as a part of Home Economics
- Emphasis on programs for disadvantaged youth
- Provision in act to support training in instructional content.

In order that the total resources of vocational teacher education may be brought to bear on the problems in the traditional service areas, there is a need for everyone to clearly understand the commonalities and differences in the programs. In terms of commonalities, all service areas: (1) are concerned with training for gainful employment; (2) engaged in programs at several levels and in several kinds of institutions; (3) concerned with the providing of adequate ancillary services; (4) require extensive shop and laboratory facilities; (5) have placement of students as a responsibility; and (6) must provide curriculums based on the needs of an occupation or cluster of occupations based on an analysis.

Every effort should be made to capitalize on commonalities among teacher education services and to identify activities that can be provided cooperatively or be provided by a single staff.

At the same time to work effectively, it is necessary that the uniqueness of the programs in the various services be recognized in order that provision may be made to provide for them.

TOPIC: Current Trends in Facilities Design

Michael Russo, Assistant Director
Facilities Planning and Development
Division of Vocational-Technical Education
U. S. Office of Education
Washington, D. C.

OUTLINE:

I. Future Design

- A. Meet needs of present and future
- B. Critical evaluation of industrial trends
- C. Traditionally built building inadequate
- D. Cannot meet curricula demands, etc.
- E. Greater flexibility and adaptability
- F. High quality

II. Site

- A. Prominent location
- B. Availability of services
- C. Transportation
- D. Campus selected for its natural beauty
- E. Must emphasize class A installation

III. Communication

- A. Educators must explain in detail needs to architect
- B. Must know depth and future projections of program
- C. Period which is exciting and creative
- D. Educators must learn more of the architectural probl

IV. Administration

- A. Primary and secondary units
- B. Secondary located in cluster unit
- C. Ease of student movement
- D. Testing of adults - registration

V. Guidance

- A. Primary and secondary units
- B. Secondary located in cluster unit
- C. Testing of adults
- D. Time factor

VI. Flexibility

- A. No "static-wall" concept
- B. Optimum spanning
- C. Movable walls - panel units
- D. Ability to adjust to change of curriculum
- E. Custodial staff can make such changes

VII. Interior Shop Problems

A. Office, storage, etc., movable partitions
B. Flexible units for washing-drinking facilities
C. All units equipped for power and potential growth
D. Tool cribs portable in nature
E. Artificial partitions, lockers, etc.

VIII. Environmental Standards

A. 70% of all facilities air conditioned
B. 90% partial
C. Difficult to air condition automotive units
D. As to above must rely on air transferral
E. Emphasize 24 hour concept
F. Accoustical control
G. Zoning

IX. Library

A. Audio-visual center
B. Communication center
C. Located on ground floor - available to general public
D. Technical resource center

X. Large Centralized Units

A. Teaching Stations
B. Warehouse
C. Stock keeping
D. Distribution

XI. Cross Sectional Corridors - Canteen Units

A. Mobility
B. Canteen Units
C. Stand up tables - no chairs
D. Not adjacent to student lounge
E. Must still meet all safety standards

XII. Multiple Staffing

A. Staff - 2-3 units
B. Require work rooms
C. Multiple use of facilities
D. Must orient staff to this concept
E. Multiple custodial staff

XIII. Statistics

A. 208 schools in fiscal 65
B. 144 new
C. Fiscal 66 - approximately one new or remodeled each da
D. Projections for 1975 - need over 1800 new facilities

TOPIC: Research in Vocational-Technical Education

Otto Legg, Research Specialist
Division of Vocational-Technical Education
U. S. Office of Education
Washington, D. C.

Research is not necessarily as complex, difficult, mysterious, esoteric as a pedantic attitude can make it seem. In common with all things that are really great, it is essentially simple in concept; it has been comprehensively and simply defined in eight words as "the orderly treatment of data to answer a question." Very simply stated, research is seeking the answer to crucial problems. More specifically, vocational-technical research is that activity directed toward the development of a science of behavior in vocational-technical edu tion situations. Vocational-technical research must develop its own body of concepts, theories, and principles adapted to the ordering and prediction of events in this particular educational sphere.

There are many questions about the value of research which need to be answered in regard to the different methods of research, the value of research, and the benefits to be derived. Many administrative leaders have correlated research with statistical reporting of number of people and things. This surv information is very valuable, but it is only one method of gathering information. This kind of information gives no cue as to the effectiveness of teachers, curriculum materials, performance of students, teachers, or the correctness of program structure.

The usual first step is to gather information by the survey method. The next step could be casual-comparative research; a comparison of two or more methods of scheduling, teaching, etc. The most productive, the most expensive, and up until the present time the least frequently used method has been experimental research. Experimental research properly conducted can give the kinds of answers needed to expand the store of knowledge about student and teacher behavior, the effectiveness of media, curriculum materials, space utilization, to mention a few. All of the methods cited can logically be drawn upon in the design of developmental research programs.

The education and development of research leaders is crucial. Research cannot be taught by formula. Research by formula will become less and less adequate as the size of the program increases. A maturity of judgment is required in deciding what is important and researchable. It is of critical importance that the directors selected for new research programs have the

necessary foundation in research, general education, vocational education, and industry. To provide this necessary maturity of judgment to evaluate and guide appropriate research activity in vocational-technical education in this present year and the years which are to follow, vocational-technical education needs individuals who are first able to recognize problems that are appropriate and critical.

Three general aims of application are suggested: (1) the expansion of basic knowledge and understanding of education, (2) the translation of this knowledge into new or revised educational programs which can be tested and implemented throughout the country, and (3) the dissemination of information about new knowledge and new programs to practitioners and others concerned with education, including the public.

We know of the accomplishments of the President's Panel for Vocational Education, the subsequent formulation and passage of the 1963 Vocational Education Act; an integral part is the program for research. One of the major problems of research is gaining acceptance. Personnel on all levels have varying degrees of apprehension concerning recommended change. Added to the problem of acceptance of research is the decision of where to direct the information to obtain the greatest advantage.

The administrator appears to be the change agent in most systems; teacher initiation of change is restricted to modest adaptations in classroom practice where the effect will not disturb others outside the classroom and experience center. So, the effective dissemination of educational research is a prime endeavor in the transferral of refined results of developmental projects to appropriate educational institutions. This step may involve school by school reorganization of curriculums, updating the preparation of teachers, and tooling up of instructional resources in the development of systems of quality control to guarantee that the outcome sought will be achieved. Even though large sums will be spent on research, by far the largest sum will go into workable plans at the local school system level. The results of a million dollar research project once accepted could reflect change in operating programs of 50 to 100 times that amount. If the resulting change is sound, fine; if after a change is initiated it has been found not to work, the waste in student time, teacher effort, and administrative costs can be tremendous. So a refined judgment is necessary in what to reject and what to accept.

The first guide to vocational research was issued during October, 1964. The title was "Conditions and Procedures: Grants for Research, Training, Experimental, Developmental, or Pilot Programs in Vocational and Technical Education."

In the second year following reorganization of the Office of Education, a new Bureau of Research proposal format was issued and the "Guidelines for the Division of Adult and Vocational Research Programs" was put in draft form. It further defined the organization of the three branches within the divisions. The Employment Opportunities Branch concentrates on those programs which relate to economic and occupational information needed to plan, administer, and evaluate programs of adult and vocational education; to facilitate students' career choices; and to ease transition from school to work and from job to job.

The Human Resources Branch focuses on the person preparing for or involved in the world of work.

The Educational Resources Development Branch concerns itself with the improvement of existing vocational programs and the development of new programs and the personnel to run them. The Branch stresses research, experimental, developmental, and pilot programs and evaluates their success in the fields of curriculum development and instructional media and methods, organization, administration, teacher education, and facilities.

TOPIC: Planning Total Programs of Vocational-Technical Education

S. D. McMillen, Director
Program Planning and Development Branch
Division of Vocational-Technical Education
U. S. Office of Education
Washington, D. C.

As we look back over the recorded history of mankind, we find peaks of recorded progress and advancement of human knowledge.

It is recognized and generally agreed that the two decades since the end of World War II--1946-1966--encompasses a period in the explosion of human knowledge and progress exceeding the previous recorded history of mankind.

An examination of only a few of the typical headlines in our daily paper will illustrate the depth and breadth of the changes that are taking place--Surveyor, a total success, transmits 144 lunar pictures of the moon's surface; Eugene Cernan completes two-hour walk in space; Telestar used to transmit pictures of world events at the time they occur; Mechanical heart transplant keeps man alive; Community planning group sets stage for equal employment, housing, and education.

A cartoon in a recent Washington paper illustrates what I have been pointing out--"As a commencement speaker, I used to admonish the graduates to reach for the moon--what do I tell them now?"

Program planning and development is not new to our society--what is new is that the activities have become more complex; the magnitude of programs has expanded enormously; and the funds of all programs have greatly expanded, necessitating immediate and long-range planning at all levels of responsibility.

Organized, comprehensive, immediate, and long-range planning in top management levels is largely a post-war development pioneered by private industry.

In August, 1965, President Johnson directed the introduction of a planning-programming-budgeting system in each of the Executive agencies as a means for achieving more effective and efficient management programs. The "systems" approach introduced in the Department of Defense is a method of utilizing the planning and development approach to immediate and long-range problems.

A concise definition of planning is one used by Secretary of Defense McNamara:

> " . . . planning is simply a systematic appraisal and formulation of your objectives and of the actions that you believe necessary to achieve those objectives."

Planning, used in the foregoing sense, is not merely forecasting or predicting the future. It is not solely the projection of current programs or their costs. Neither is planning a process that deals only with future effects of present decisions. Planning is largely a job of making things happen that would not otherwise occur.

A basis for decision-making.

Planning is a frame of mind, a new way of looking at problems, a viewpoint, rather than a tool or technique. While it is one of top management's most important responsibilities, it is dependent for success upon the participation of all management levels in the formulation of plans and in their execution.

The planning process should make all members of an organization planners in themselves and work toward achieving the major goals and objectives of the organization. Planning is done by an organization as a whole, not by a small group of gifted individuals.

Planning as framework for decision-making is very important, yet it usually runs second to operation in terms of priority; consequently, the administrator who is a doer, often gets in a position where he reacts to, rather than influences, events. Comprehensive planning keeps goals and objectives in the forefront and stresses factors involved in reaching them.

Principles of Planning

Effective planning requires more than new staff or procedures--there are principles which are useful in the nature and structure of planning:

1. Planning which is not related to the decision-making process and does not have the support of top management will be ineffective.

2. Planning formulates the goals necessary for meaningful group action throughout the management cycle.

3. The planning process must contribute to the accomplishment of objectives and must permeate the organization.

4. Effective planning requires the formulation of policy for procedures and programs.

5. Planning requires adequate and proper timing including the scheduling of key events.

6. "A plan held close to the breast of the administrator will have little positive effect on current operations." Adequate communication of goals, objectives, planning premises and data, choices, and program designs are required throughout all levels of an organization.

Recent Federal legislation has placed new and added responsibilities with the States. Business, industry, parents, civic leaders, organizations, and legislatures are calling for more sophisticated and manifold services by our schools. Yet even with these increased demands, we are told that our educational and political leaders are reluctant to recognize the economic, social, and educational revolution that is taking place.

Educators in general, and vocational educators in particular, have long recognized the need for expanded and updated vocational education programs.

Recent Federal legislation has placed added responsibility and opportunities in the hands of vocational-technical educators to expand existing programs and develop new programs to meet the needs of our rapidly changing work force.

To meet the responsibilities and opportunities provided in the new legislation, the Division of Vocational and Technical Education was reorganized to assume the functional responsibilities in administering the new legislation and assisting States in the administration, implementation, and operation of programs meeting the needs of all people in all communiities.

Never in the history of vocational-technical education have we faced the multiplicity of problems and the need for immediate and long-range planning at the Federal, State, and local levels.

Your stewardship under Federal legislation has increased from--

$45.3 million of Federal funds in 1960, to
$450 million of Federal funds in 1966, under all Acts.

If we add the State and local funds, these dollar expenditures are rapidly approaching the $1 billion figure for vocationa technical education.

Elements of Program Planning and Development

Fiscal Matters

Current data -- long-range projections

- ----Labor force
- ----Employment opportunities
- ----Population data
- ----Educational data

Facilities -- Equipment - Instructional Materials

Personnel

- Needs
- Recruitment
- Leadership Development

Consultative Services

Teacher Education--Pre- and In-Service

Curriculum Development

Guidance

Interagency Cooperation

Research

Evaluation

Follow-up

TOPIC: Curriculum Changes in Vocational-Technical Education

William Berndt, Specialist
Curriculum and Instructional Materials
Division of Vocational-Technical Education
U. S. Office of Education
Washington, D. C.

Curriculum changes are occurring at a rapid pace in vocational-technical education. The Vocational Education Act of 1963 brought about changes that have expanded and broadened the course offerings in several areas. Directly affected was the curriculum in office and business education, home ecnomics, and agricultural education. The provisions of the Act spelling out training for persons who have academic, socio-economic, or other handicaps and the training and retraining provisions are bringing about curriculum modification in other phases of vocational education.

The inclusion of office occupations education represents a new facet for vocational education. Guidelines are being developed that will tend to lead away from isolated jobs toward a total systems concept in which each job is identified by function and relationship to the entire operation in the Office of Education.

Home economics educators have been exploring ways to incorporate information and experiences into the curriculum that will prepare young people for wage earning occupations. Teacher training institutions are searching for ways to alter course offerings to give teachers background for teaching courses for young wage earners in home economics related occupational areas.

Many States are modifying existing courses or adding new ones in agriculture related occupations. Several technologies curriculums are being developed in the agriculture education field. New curriculum laboratories to prepare agriculture education materials are being opened. State staff members are being designed to handle agricultural curriculum materials developments.

States are moving into training in a variety of novel and challenging occupational areas. Interest manifests itself in requests received by the Division for help in supplying curriculum guides in many new fields. Instructional materials are being developed for courses in laser technology, numerical control of machine tools, radiography, dental laboratory technician and others. Interest in training activity and in curriculum materials is heightening in such areas as microelectronics, school lunchroom supervision, plastics technology and similar widely diverse, sometimes unusual, occupational areas.

Curriculum development activity at the State level is frequently carried on by the teacher trainers and the teacher training institutions. As the number of teacher educators increases, there is oftentimes an increased emphasis on curriculum development through committee activity, workshops, summer institutes and the like. However, expansion of staffs dealing with curriculum development are being increased.

An example of this growth and development in staff is exemplified by the happenings in one State that presently has four curriculum laboratories. Projections for this State call for the addition of the following:

The addition of a curriculum laboratory for the development of materials in the agriculture field.

The addition of specialists in curriculum development in home economics related to wage earning occupations.

The adding of one each, staff members in the office occupations and the handling of persons with special needs.

Several other States have indicated the employment of a person to supervise curriculum development activity.

Most States indicate new or an acceleration of activity in curriculum development and revision.

During fiscal year 1966 the Office of Education has presented proposals for contracts totaling more than $450,000.

Advisory committees, organized labor and associations are being brought into curriculum materials development activities by the States. As added staff members and new laboratories get under way, teachers will have new material with which to work. States are developing teaching aids and making them available to programs.

In summary, the Vocational Education Act of 1963 is making possible added staffing of curricula laboratories and the employment of new curriculum specialists in the State level. These added workers are developing materials for teachers, and in some instances, are setting up laboratories to produce items needed within the State. There is a drawing together of curriculum development activity in various services into one central State-wide laboratory. Such a plan can save dollars and time and effort in the States.

TOPIC: Cooperation With Other Agencies In Coordinating Programs of Vocational Education: A Symposium

SPEAKER: Charles P. Elliott, Jr.,
Coordinator of Field Services
Vocational Rehabilitation
State Department of Education
Jefferson City, Missouri

Basically, vocational rehabilitation services are provided for the physically and mentally disabled people. All services are provided at or near the working age in order to help the individual obtain employment.

The major services provided are:

1. A complete medical examination in order to determine how this impairment might be reduced or alleviated.

2. Counseling and guidance services to achieve good vocational adjustment.

3. Physical therapy to include medical, surgical, psychological and hospital benefits, including the furnishing of artificial limbs.

A history of vocational rehabilitation was reviewed with its origin dating back to President Wilson. Changes and improvements brought about through recent legislation were explained.

Specialized services by vocational rehabilitation division include the following:

1. Work adjustment training.

2. Personal adjustment training.

3. Transportation of individual to and from the service or program.

4. Provision of tools and equipment.

5. Occupational allowances, especially for the establishment of small businesses.

Certain problems with vocational schools were enumerated. The main problem is the inability of entering a handicapped person at any time since courses are organized on a two-semester basis. Referrals at any other time must be delayed or else referred to a private trade school. Most vocational training is extremely good, but some non-accredited schools are not up to par in so far as standards are concerned. Problems have also been experienced in that many complete their training but are not employable due to union or company policy.

SPEAKER: Randel Price
Professor of Extension Education and Assistant Training Director
University Extension Division
University of Missouri
Columbia, Missouri

Extension education has been in existence for many years. Many of the universities have started extension programs in engineering, etc. when interest called for the program.

There are four campuses of the University of Missouri--St. Louis, Kansas City, Rolla, and Columbia--and there are extension offices on each campus but the major one is on this campus. The other campuses are growing rapidly, however. This combining of extension services into one division has called for cooperation.

About 15 other states have followed similar programs. Various acts provide grants for re-education, and extension education is very important in this area. It is one of the major areas of the extension division.

Subject matter is as varied as the people enrolled. Restaurant management, sales, real estate management, rapid reading, education, personality development, and what have you, are examples to show the possibilities for subject matter.

You people have a key position for calling attention to the needs these people have. The extension director is in your area and through him you can call attention to the subject matter that is needed in that area, and you can avail yourself of this re-education. Sessions range from one week to several weeks. The extension system makes resources of universities available to people all over the state.

SPEAKER: Stanley Osborne
Manpower Employment Coordinator
Missouri Employment Security
Jefferson City, Missouri

The main policy of the Employment Security Division is that of cooperation with those involved in the MDTA programs. Cooperation is attained in most cases but the problem of communication becomes quite serious at times.

The major problems of our agency are budgetary and procedural problems at the state level. Most of them are usually worked out, but we still seem to have them.

Problems encountered in the operation of the program are:

1. The adjustment of training and achievement. Different levels of achievement in any course make this problem a continuous one.

2. Entry qualifications are often too high. (Evaluations by teachers are very helpful in placement.)

3. The development of a program for the motivation of trainees in the hard core classification.

4. Jealousy between agencies involved.

5. High drop-out rate.

6. Care in completing referral forms, allowance forms, and other reports.

7. Allowance of vacation periods not originally scheduled in project.

8. Lack of training guidelines.

TOPIC: Evaluating Progress in Vocational-Technical Education

Thaine E. McCormick, Regional Representative
Division of Vocational-Technical Education
U. S. Office of Education
Kansas City, Missouri

The Vocational Education Act of 1963, authorizing Federal grants to states to assist them in strengthening and improving the quality of vocational education in the nation, also specifies periodic review of vocational education programs and laws. This year, 1966, the Secretary of Health, Education, and Welfare is required to appoint an Advisory Council on Vocational Education to review and make recommendations concerning the status of vocational education programs, the administration of these programs, and the Acts under which funds are appropriated.

Provision was made, when the Division of Vocational and Technical Education in the U. S. Office of Education was reorganized, to administer the new legislation, for a small program evaluation staff to work directly with the Assistant Commissioner responsible for these programs and to serve as liason with the Council, when it is appointed by the Secretary. The purpose of my presentation today is to describe plans for the functioning of this operation--our objectives, the procedures we plan to follow--our approach to the problem of evaluation at the national level.

Stated as simply as possible, the objectives of the evaluation program are: to develop a comprehensive and responsive system for determining the effectiveness of vocational-technical education programs in terms of the purposes of the Acts as administered by the Division of Vocational and Technical Education; to organize the system so that it will meet both the short and long term needs of the U. S. Office of Education for program planning and decision making; and to provide leadership and service to the states, assisting them to carry out their program evaluation responsibilities.

The problem of evaluating progress in all aspects of vocational-technical education in 54 states and territories for more than 4.5 million students in thousands of schools is almost overwhelming. The sheer size of the problem probably precludes a systematic nationwide approach using teams of professional educators to evaluate individual institutions, school district by school district. We are viewing evaluation at the Federal level, therefore, as largely an analytical process based on an extensive and comprehensive information system supplemented by the results of research studies and by selected on-site reviews.

As I have already stated and as all of us know, defining goals or objectives is basic to any evaluation process. This is an essential first step since it is against the goals or objectives

that progress will be assessed. Step two is the identification of those items whose measurement will indicate progress toward, or problems encountered in moving toward the established goals. Identifying items is usually simpler than measuring them, but devising a system for measuring the items (and I am speaking of qualitative as well as quantitative measures) is an obviously essential step; it must precede any analysis of accomplishments achieved in relation to goals.

What are the major items which can help to indicate program status? Logically they fall into three major groups: (1) The population to be served. (2) The functioning of the education system: the administration, organization, and existing power structure; the physical capacity of the system (facilities and equipment); the teachers, administrators, counselor and other personnel; the curricula; the services (guidance placement, research, data collection, etc.), and (3) the servicing of needs of employers and concerns of society, including current and future market demand and fulfillment of citizenship and other non-economic concerns of society.

Measurements which will assist us in evaluating progress toward achieving goals include:

1. Trends in numbers and characteristics of persons enrolled in and those completing programs, compared with the estimated proportion of the population needing or desiring training.

2. Success in terms of pre-employment information, such as educational achievements; demonstrations of basic knowledge or skills needed to earn a living; knowledge of world of work -- occupations, entry and progression requirements, salaries, etc.; work habits; attitudes; methods of self appraisal; and knowledge of how to obtain a job.

3. Effectiveness in terms of the ability of State administrations to plan and organize; to attract and hold students; to provide sufficient numbers of well trained teachers, facilities and equipment, instructional materials; to provide needed services such as guidance, placement and research; to anticipate new areas and adjust program offerings to reflect current and projected job openings; and to provide effective articulation between levels and types of schools assuring maximum flexibility for individuals seeking training.

4. Effectiveness in achieving objectives in terms of follow-up information (placement, job satisfaction, advancement, mobility, employer satisfaction, contribution to the community and other aspects of citizenship).

5. Assessment in terms of cost effectiveness and other analyses of expenditures such as shifts among existing programs, allocation of funds to new programs, approaches to balanced program offerings and other evidences of effective and flexible funding.

EVALUATION OF SEMINAR

An evaluation of the seminar was made by the participants at the end of the first week. The evaluation indicated strengths and weaknesses of the first week and enabled the staff to make adjustments and try new techniques.

The response from the final evaluation was very favorable concerning the seminar in general. Participants were more favorably impressed with some sessions than they were with others. The inclusion of all phases of vocational-technical education caused universal approval among the group. A trend toward a unification of talent among all vocational groups was in evidence from this evaluation.

The group expressed a strong belief in participation by the individual and, as a whole, most of them felt this opportunity to participate was provided. Interest was high in regard to the various leadership techniques that were introduced and placed into practice. All of the techniques were applauded in the evaluation, and some were criticized for consuming too much time during the two weeks.

In general, the evaluation should be an important guidepost in the advance preparation for future seminars. The endorsements and criticisms were very constructive and most valuable. Many new ideas for improvement were revealed.

The most satisfying reaction came from a majority of the participants: that they felt better prepared and challenged to provide good leadership in vocational-technical education at national, state, and local levels.

The evaluation form on the following page was used in appraising the worthwhileness of the seminar on the final day of the two week period. The distribution of the responses to Item One on the scale is shown in Table I.

TABLE I

OVER-ALL PARTICIPANT RATING OF SEMINAR

Very Successful	Quite Successful	About Average	Not Very Successful	Very Poor Conference
38	17	0	0	0